



antibodies, used for diagnosis, treatment and as vaccines  
XX XX Sequences AT964648-77 represent claimed nucleic acid sequence from the multiple sclerosis related virus 1 (MSRV-1), especially the env, pol and part of the gag gene region, but exclude LTR sequence represented by AT96527. This sequence is from clone LTR96527. The sequence is an endogenous retroviral element found in lymphocytes expressing the MSRV-1 retrovirus in a patient with multiple sclerosis. The sequence was isolated by PCR using primers described above. The sequences are associated with multiple sclerosis. Nucleic acids are also associated with rheumatoid arthritis. Nucleic acids from this virus can be used in the diagnosis of multiple sclerosis and rheumatoid arthritis.